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**REMARKS**

In the Office Action the Examiner rejected claims 1, 3, 5, 7, 9, 14, 16, 21, 23, 25, 30, 33, 38, 40, 45, 47, and 49. Reconsideration of the application in view of the remarks set forth below is respectfully requested.

**Rejections under 35 U.S.C. § 103**

The Examiner rejected claims 1, 3, 5, 7, 9, 14, 16, 21, 23, 25, 30, 33, 38, 40, 45, 47, and 49 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 5,062,059 to Youngblood et al. (hereinafter "the Youngblood reference" or "Youngblood"). Applicants respectfully traverse this rejection.

***Legal Precedent***

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). To establish *prima facie* obviousness of a claimed invention, *all* the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 U.S.P.Q. 580 (C.C.P.A. 1974) (emphasis added). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970). Additionally, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985).

Additionally, the Examiner must provide *objective evidence*, rather than subjective belief and unknown authority, of the requisite motivation or suggestion to combine or modify

the cited references. *In re Lee*, 61 U.S.P.Q.2d. 1430 (Fed. Cir. 2002). Moreover, a statement that the proposed modification would have been “*well within the ordinary skill of the art*” based on individual knowledge of the claimed elements cannot be relied upon to establish a *prima facie* case of obviousness without some *objective reason to combine* the teachings of the references. *Ex parte Levengood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993); *In re Kotzab*, 55 U.S.P.Q.2d. 1313, 1318 (Fed. Cir. 2000); *Al-Site Corp. v. VSI Int’l Inc.*, 50 U.S.P.Q.2d. 1161 (Fed. Cir. 1999). (Emphasis added).

Furthermore, the pending claims must be given an interpretation that is reasonable and consistent with the *specification*. See *In re Prater*, 162 U.S.P.Q. 541, 550-51 (C.C.P.A. 1969) (emphasis added); see also *In re Morris*, 44 U.S.P.Q.2d 1023, 1027-28 (Fed. Cir. 1997); see also M.P.E.P. §§ 608.01(o) and 2111. Interpretation of the claims must also be consistent with the interpretation that *one of ordinary skill in the art* would reach. See *In re Cortright*, 49 U.S.P.Q.2d 1464, 1468 (Fed. Cir. 1999); M.P.E.P. § 2111.

#### ***Initial Remarks***

The present application relates to devices and techniques involved in remotely managing server computer systems. See Application, page 10, lines 5-13. In the field of remotely managed server computer systems, remote console functionality assist logic generally allows a user to access the server from a remote computer as if the user were at the server. See *id.*, page 6, lines 2-9. Remote console functionality assist logic provides remote access to a server in the event of a failure, when normal access to the server and internal diagnostic subsystems would remain otherwise inaccessible. See *id.*, page 5, line 13, to page 6, line 1. Remotely managing a server computer system using such logic thus *does not require the server computer system to be functioning properly* to gain remote access to the

server; in fact, a particularly acute need for remote access arises *because of* malfunction. See *id.*, page 6, lines 16-23.

The Youngblood reference stands in stark contrast, representing a system completely unrelated to remote server management. Instead, Youngblood discloses an apparatus for time-sharing a '386 computer, allowing multiple remote users on weaker computers to share the hardware resources of a single '386 system. See Youngblood, col. 1, lines 10-17; col. 2, lines 56-60. Where the instant application is directed to remotely managing and monitoring a host computer, the Youngblood reference teaches not remote management but total remote interconnection such that a remote terminal "appears to *physically reside in a memory unit* hardwired" to the host computer. *Id.*, col. 4, lines 46-47. (Emphasis added). Because the remote terminal of Youngblood serves merely as an extension of the host computer, if the host system malfunctions, the apparatus facilitating intercommunication would also cease to function. See *id.*, col. 5, line 64, to col. 7, line 33 (Youngblood apparatus receives commands from the host bus).

***Claim Features of Amended Independent Claims 1, 16, and 33 Omitted from Youngblood***

In the instant application, amended independent claim 1 recites, *inter alia*, "an expansion slot; an expansion board comprising a processor... and a remote console functionality assist logic structure *controlled by the processor* to provide video signals generated by the managed computer system to a remote computer system and *configured to operate independently of a central processing unit (CPU) of the managed computer system.*" (Emphasis added). Amended independent claim 16 recites, "an add-in board disposed in the expansion slot, the add-in board comprising a processor" and "a remote console functionality assist logic structure *controlled by the processor* and *configured to operate independently of a*

*central processing unit (CPU) of the computer system.*” (Emphasis added). Amended independent claim 33 recites, “an add-in board disposed in the expansion slot, the add-in board comprising a processor *configured to operate independently of a central processing unit (CPU) of the computer system*” and “remote server console device comprising a remote console functionality assist logic structure, wherein the operation of the remote server console device is *controlled by the processor.*” (Emphasis added).

In sharp contrast, Youngblood fails to disclose an expansion slot, expansion board or add-in board comprising a processor, remote console functionality assist logic *controlled by a processor*, or remote console functionality assist logic *configured to operate independently of a central processing unit (CPU) of the managed computer system*. As discussed above, Youngblood relates to an apparatus for time-sharing a ‘386 computer system among multiple users on weaker remote terminal computers. *See* Youngblood, col. 1, lines 10-17; col. 2, lines 56-60. When in operation, the remote computer remains coupled to the host computer such that the remote terminal “appears to *physically reside in a memory unit* hardwired” to the host computer. *Id.*, col. 4, lines 46-47. (Emphasis added). As would be clearly appreciated by one of ordinary skill in the art, a memory unit hardwired to the host computer is ultimately *controlled by the CPU of the host computer*, and not by a processor contained on an expansion board.

The Examiner suggests that the host controller (1) and remote terminal (14) constitute remote functionality assist logic which is controlled by host logic controller (8). *See* Office Action, page 3, 1<sup>st</sup> paragraph. As FIG. 1 plainly indicates, however, a terminal logic controller (12) pertains to the remote terminal (14), while the host logic controller (8) pertains to the host controller (1). *See* Youngblood, FIG. 1. Accordingly, the host logic controller (8)

could not reasonably be construed to control both the host controller (1) *and* the remote terminal (14) without completely ignoring the terminal logic controller (12). Even if, assuming *arguendo*, the host logic controller (8) of Youngblood were construed to be a processor, the host logic controller (8) merely facilitates communication between the host CPU (not pictured in FIG. 1) and the remote terminal via host controller (1), such that the host CPU recognizes the remote terminal as physically residing on the host bus (26). *See id.*, FIG. 1; col. 4, line 45, to col. 6, line 31. Furthermore, as evident in FIG. 4A, the host controller remains idle *until receiving an initiation request from the host bus*. *See id.*, FIG. 4A; col. 7, lines 9-33. In sum, the host logic controller (8) could not reasonably be construed to be a processor *controlling* remote functionality assist logic as presented in the instant claims.

Most critically, the apparatus of Youngblood relies on a CPU of the host computer to operate, and is plainly *not configured* to operate independently of a central processing unit (CPU) of the host. Youngblood is specifically directed to communication between a host CPU and a remote computer and clearly not to remote server management, as previously addressed. *Id.* As discussed above, the host controller and host logic controller (8) are controlled by the host CPU. *See id.*, FIG. 1; FIG. 4A; col. 7, lines 9-33; col. 4, lines 46-47. The instant claims, however, recite logic *configured to operate independently of a central processing unit (CPU) of the managed computer system*. Because the apparatus of Youngblood is not configured to operate independently of a CPU of the host computer, and in fact, *could not operate without the host CPU*, Youngblood fails to disclose all elements of amended independent claims 1, 16 and 33. Accordingly, for at least this reason, Applicants respectfully request withdrawal of the rejection of amended independent claims 1, 16, and 33 under 35 U.S.C. § 103(a).

***Claim Features of Amended Independent Claims 5, 23, and 30 Omitted from Youngblood***

Amended independent claim 5 recites, “a remote console functionality assist logic structure disposed on the bus and *configured to operate notwithstanding whether a central processing unit (CPU) of the managed computer system malfunctions*, the structure controlled by the processor.” (Emphasis added). Amended independent claim 23 recites, “a system processor operably coupled to an Input/Output (I/O) bus” and “a remote console functionality assist logic structure *disposed on the bus*, the logic structure adapted to capture the video signals of the video controller and direct video information to a remote computer system *notwithstanding whether a central processing unit (CPU) of the remotely managed computer system is functioning properly*.” (Emphases added). Amended independent claim 30 recites, “controlling a remote console functionality assist logic structure with an Input/Output processor, the remote console functionality assist logic structure being associated with the computer system and *configured to operate without regard to whether a central processing unit (CPU) of the computer system is malfunctioning*.” (Emphasis added).

As discussed above, Youngblood fails to disclose remote console functionality assist logic *controlled by a processor*. Additionally, however, Youngblood also fails to disclose remote console functionality assist logic *configured to operate notwithstanding whether a central processing unit (CPU) of the managed computer system malfunctions*. Since the apparatus of Youngblood relies on the CPU of the host computer to operate, as discussed above, the entire functionality of the apparatus of Youngblood therefore depends on the proper functioning of the host computer and the host CPU. *See, e.g., Youngblood, FIG. 4A; col. 4, line 45, to col. 6, line 31; col. 7, lines 9-33.* Youngblood, therefore, fails to disclose a device capable of operating when the host CPU malfunctions, and thus Youngblood fails to

disclose all elements of amended independent claims 5, 23, and 30. Accordingly, for at least this reason, Applicants respectfully request withdrawal of the rejection of amended independent claims 5, 23, and 30 under 35 U.S.C. § 103(a).

***Claim Features of Amended Independent Claim 9 Omitted from Youngblood***

Amended independent claim 9 recites, “an expansion slot... an add-in board disposed in the expansion slot, the add-in board comprising an on-board processor” and “a remote server console device adapted to communicate on the bus *without diverting resources from a system processor of the managed computer system*, the device having a remote console functionality assist logic structure *controlled by the on-board processor*.” (Emphasis added).

As discussed above, Youngblood fails to disclose an expansion slot, an add-in board or expansion board, or remote console functionality assist logic *controlled by a processor*. Additionally, however, Youngblood also fails to disclose remote console functionality assist logic configured to operate *without diverting resources from a system processor of the managed computer system*. The apparatus of Youngblood relies on the CPU of the host computer to operate and, moreover, the communication logic of the apparatus of Youngblood is controlled by the host CPU. *See* Youngblood, FIG. 4A; col. 4, line 45, to col. 6, line 31; col. 7, lines 9-33. Because the host CPU must control and attend to the apparatus of Youngblood, as previously discussed, the apparatus of Youngblood diverts resources from the CPU of the host computer system. Youngblood, therefore, fails to disclose a device capable of operating without diverting resources from a system processor of the host computer, and thus fails to disclose all elements of amended independent claim 9. Accordingly, for at least this reason, Applicants respectfully request withdrawal of the rejection of amended independent claim 9 under 35 U.S.C. § 103(a).

***Claim Features of Amended Independent Claim 40 Omitted from Youngblood***

Amended Independent claim 40 recites, *inter alia*, “providing the computer system with a remote console functionality assist logic structure adapted to *monitor activities in the computer system* and provide data to a remote user; and providing a *processor* contained on an add-in board mounted in an expansion slot on a communication bus in the computer system *to control the remote console functionality assist logic.*” (Emphasis added).

As discussed above, Youngblood fails to disclose an expansion slot, an add-in board or expansion board, or remote console functionality assist logic *controlled by a processor* contained on an add-in board mounted in an expansion slot. Additionally, however, Youngblood further fails to disclose remote console functionality assist logic structure adapted to *monitor activities in the computer system*. The apparatus of Youngblood relies on the CPU of the host computer to operate, and, moreover, the communication logic of the apparatus of Youngblood is controlled by the host CPU. *See* Youngblood, FIG. 4A; col. 7, lines 9-33. The host CPU must control and attend to the host controller (1) of Youngblood, as previously discussed. *See id.*; FIG. 1; col. 4, line 45, to col. 6, line 31. Youngblood does not disclose an apparatus adapted merely to *monitor activities* in the host computer, but rather discloses an apparatus adapted to completely join the remote and host computer in such a way that the remote terminal “appears to physically reside in a memory unit hardwired” to the host computer. *Id.*, col. 4, lines 46-47. Because, as discussed above, the device of Youngblood requires diverting the resources of the host CPU in order to function, the device of Youngblood is not capable of simply monitoring the activities of the host computer system. Youngblood, therefore, fails to disclose a device adapted to monitor activities in the computer system, and thus fails to disclose all elements of amended independent claim 40.



Accordingly, for at least this reason, Applicants respectfully request withdrawal of the rejection of amended independent claim 40 under 35 U.S.C. § 103(a).

***Claim Features of Amended Independent Claim 47 Omitted from Youngblood***

Amended independent claim 47 recites, “using a remote console functionality assist logic structure disposed on a bus and *controlled by an Input/Output processor configured to operate independently of a central processing unit (CPU) of the remotely managed computer system.*” (Emphasis added).

As discussed above, Youngblood fails to disclose a remote console functionality assist logic structure *controlled by a processor configured to operate independently of a central processing unit (CPU) of the managed computer system.* Youngblood, therefore, fails to disclose all elements of amended independent claim 47. Accordingly, for at least this reason, Applicants respectfully request withdrawal of the rejection of amended independent claim 47 under 35 U.S.C. § 103(a).

***Claim Features of Dependent Claims 3, 7, 14, 21, 25, 38, 45, and 49 Omitted from Youngblood***

Dependent claim 3 recites, “remote console functionality assist logic structure *comprises a video encoder* for encoding video signals transmitted between a video controller and a system processor associated with the managed computer system.” (Emphasis added). Dependent claims 7, 25, and 49 recite, “remote console functionality assist logic structure *comprises a video encoder* for encoding video signals of the video controller.” (Emphasis

added). Dependent claims 14, 21, 38 and 45 recite, "remote console functionality assist logic structure *comprises a video encoder* for encoding video signals of a video controller associated with the computer system." (Emphasis added).

In sharp contrast, Youngblood plainly fails to disclose a remote console functionality assist logic structure which *comprises a video encoder*. The Examiner suggests that a graphics controller (22) located on remote terminal (14) inherently comprises a video encoder. See Office Action, page 3, first paragraph. Even if, assuming *arguendo*, the graphics controller (22) comprises a video encoder, the graphics controller (22) is plainly located *on the remote terminal (14)*. See Youngblood, FIG. 1. Such a video encoder would be useless for encoding video signals from *the managed (host) computer* for transmission to *the remote computer*. Moreover, remote terminal (14) could not be reasonably construed to constitute remote console functionality logic as presented in the instant claims, as discussed above regarding amended independent claims 1, 16, and 33. Accordingly, Youngblood does not disclose remote console functionality assist logic structure which comprises a video encoder, and therefore fails to disclose all elements of dependent claims 3, 7, 14, 21, 25, 38, 45, and 49. Accordingly, for at least this reason, Applicants respectfully request withdrawal of the rejection of dependent claims 3, 7, 14, 21, 25, 38, 45, and 49 under 35 U.S.C. § 103(a).

#### ***Improper Use of Official Notice***

By admission of the Examiner, the Youngblood reference fails to disclose the add-in board or expansion slot as recited in the claims. In recognizing the deficiencies of the Youngblood reference with respect to the this element, the Examiner has taken Official Notice of facts outside of the record that the Examiner apparently believes are capable of

demonstration as being “well-known” in the art *prior to the priority date of the present application*. Therefore, in accordance with M.P.E.P. § 2144.03, Applicants hereby seasonably traverse and challenge the Examiner’s use of Official Notice. Furthermore, Applicants emphasize that the “well-known” facts asserted by the Examiner are *not of a “notorious character”* and are clearly *not “capable of such instant and unquestionable demonstration as to defy dispute.”* See M.P.E.P § 2144.03. (Emphases added). Specifically, the Applicants respectfully request that the Examiner produce evidence in support of the Examiner’s position as soon as practicable during prosecution and that the Examiner add a reference to the rejection in the next Office Action. If the Examiner finds such a reference and applies it in combination with the presently cited references, the Applicants further request that the Examiner specifically identify the portion of the newly cited reference that discloses the allegedly “well known” elements of the instant claim, as discussed above, or withdraw the rejection.

In view of the foregoing remarks, Applicants respectfully assert that the Youngblood reference, taken alone or in combination with the Official Notice, fails to disclose all the elements of the independent claims. As such, Applicants respectfully request withdrawal of the rejection of all independent claims, as well as all dependent claims based on their respective dependencies and for unique matter recited, and allowance of all pending claims.

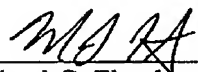
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**Conclusion**

In view of the remarks set forth above, Applicants respectfully submit that all pending claims should be in condition for allowance. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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Michael G. Fletcher  
Reg. No. 32,777  
(281) 970-4545

**Correspondence Address:**

IP Administration  
Legal Department, M/S 35  
HEWLETT-PACKARD COMPANY  
P.O. Box 272400  
Fort Collins, CO 80527-2400